ABSTRACT OF THE DISCLOSURE

A synchronizing position detecting circuit includes a window size determining circuit, a synchronizing code generating circuit, a correlation circuit and a synchronizing position determining circuit. The window size determining circuit calculates a moved distance of a mobile station during a sleep time based on a moving speed and the sleep time and selects a window size based on a phase change of a distance signal corresponding to the moved distance. The code generating circuit repeatedly produces a synchronizing code that coincides with a part of a code of the distance signal and successively shifts a phase of the synchronizing code by a predetermined phase width so as to shift the window size. The correlation circuit calculates a correlation function between the synchronizing code and the distance signal. The position determining circuit determines a correlation function having a maximum value to detect the distance signal and outputs a synchronizing position signal representing a detecting position.